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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,768	06/10/2005	Bernard RUCHET	AP1012USN	5556
33361	7590	05/02/2006	EXAMINER	
ADAMS PATENT & TRADEMARK AGENCY P.O. BOX 11100, STATION H OTTAWA, ON K2H 7T8 CANADA			SEDIGHIAN, REZA	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/538,768

Applicant(s)

RUCHET, BERNARD

Examiner

M. R. Sedighian

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,8,9,11-15,18,21,22 and 24-27 is/are rejected.
- 7) ☒ Claim(s) 3,4,6,7,10,16,17,19,20 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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1. This communication is responsive to applicant's preliminary amendments of 6/10/05. The amendments have been entered. Claims 1-27 are now pending.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. As to 1 and 14, specification does not clearly describe how at least one element is operative to transmit a first optical signal (S1) only if it continues to receive a second optical signal (S2) from the other elements. It appears the one element, for example, ONT 14/9 continuously transmit its optical signal.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 1 and 14, it is not clear how at least one element is operative to transmit a first optical signal (S1) only if it continues to receive a second optical signal (S2) from the other elements. For example, ONT 14/9 always continuously transmit

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optical signals through fiber line 26. There is no control circuitry to control the transmission of optical signal from ONT 14/9.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2, 5, 8, 11, 13-15, 18, 21, 24, and 26-27 are rejected under 35

U.S.C. 102(b) as being anticipated by Lee et al. (US Patent No: 6,188,509).

Regarding claims 1 and 14, as it is understood in view of the above 112 problems, Lee teaches a portable apparatus (300, 340, fig. 2) for measuring parameters of optical signals (col. 4, lines 30-35, 65-66) propagating in opposite directions (col. 4, lines 50-57) in an optical transmission path (col. 4, lines 60-63) between two elements (SL1, SR1, fig. 2), at least one of the elements (SR1, fig. 2) being operative to transmit a first optical signal (col. 4, lines 54-56, note that optical signals propagate bi-directionally between the two sides over the single fiber), the instrument comprising first and second connector means for connecting the instrument into the optical transmission path in series therewith (note that optical receiver 300 includes connector means in order to be connected to fiber lines, not shown), and means (the tapping couplers and fibers that are connected to each side of the main transmission fiber for coupling the lights to receiver 300) connected between the first and second connector means for propagating a second optical signal (the optical signal outputted by SR1, fig. 2) toward one of the elements, and measuring the

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parameters of concurrently propagating optical signals (col. 4, lines 65-67, col. 5, lines 1-28).

Regarding claims 2 and 15, Lee teaches the propagating and measuring means provides an optical signal path between the first and second connector means for conveying at least a portion of the second optical signal (col. 5, lines 11-15, 22-30).

Regarding claims 5 and 18, Lee teaches one of the elements also receives via the optical transmission path a third optical (for example, the optical signal generated by SL2, fig. 2) signal at a different wavelength (col. 4, lines 50-53) from the second optical signal, and the propagation and measuring means further comprises means for measuring parameters of the third optical signal (col. 4, lines 58-66, col. 5, lines 11-18).

Regarding claims 8 and 21, Lee teaches the measuring means comprises a separate detector (340, 350, 360, fig. 2) for each of the measured optical signal portions (col. 5, lines 1-16).

Regarding claims 11 and 24, Lee teaches the measuring means comprises custom circuitry (the circuitry of respective measuring means 340, 350, and 360).

Regarding claims 13 and 26, Lee discloses a measuring means such as a power meter 340, and such power meter can comprise a display means to display the measured parameters.

Regarding claim 27, Lee teaches the measurements are performed upon optical signals propagating concurrently in opposite directions in an optical transmission path between elements in a passive optical network (col. 4, lines 50-66).

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8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 12 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US Patent No: 6,188,509) in view of Ko et al. (US Patent No: 6,600,594).

Regarding claims 12 and 25, Lee discloses measuring means for measuring optical power (340, fig. 2) and bit error rates of bi-directionally transmitted optical signals (360, fig. 2). However, Lee differs from the claimed invention in that Lee does not disclose the measuring means comprises a suitably programmed microcomputer. Ko discloses a power meter (455, fig. 5) that is connected to computer system (col. 8, lines 9-15 and 465, fig. 5). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to connect the power meter of Lee to a computer, or to a programmed microcomputer, as it is taught by Ko, to store and analyze the measured results.

10. Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US Patent No: 6,188,509) in view of Hinch (US Patent No: 5,535,038).

Regarding claims 9 and 22, Lee differs from the claimed invention in that Lee does not disclose one of the signals is analog, and the measuring means is arranged to extract the time-averaged optical power of the signal. Hinch teaches an apparatus and method for measuring an average optical power (see abstract) by incorporating a power sensor and a power meter (20, fig. 6). Therefore, it would have been obvious to a person

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of ordinary skill in the art at the time of invention to incorporate an optical receiver and a power meter, such as the ones of Hinch, for the power meter in the optical receiver of Lee to provide an output signal corresponding to the average optical power of the transmitted signal.

11. Claims 3-4, 6-7, 10, 16-17, 19-20, and 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. R. Sedighian whose telephone number is (571) 272-3034. The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
M. R. SEDIGHIAN  
PRIMARY EXAMINER